The VacScene

Public Health – Seattle & King County **Immunization Newsletter** Volume 11, Number 3 **May/June 2005**

What's Inside?

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Public Health - Seattle & King County
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The VacScene is a publication of Public Health – Seattle & King County written for health professionals. Content is consistent with the most current recommendations from the Centers for Disease Control and Prevention (CDC) and the Advisory Committee on Immunization Practices (ACIP).

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King County Receives Immunization Awards

At the National Immunization Conference in March, the Centers for Disease Control and Prevention (CDC) presented Public Health – Seattle & King County with two awards for high immunization rates. The county received the Coverage Award for achieving an 84.4 percent coverage rate for the basic immunization series among two year olds, and the Improvement Award for improving immunization coverage among children by 17.2 percent since 2000.

"We must thank the parents, along with health care professionals who, by immunizing their children, are making the right decisions for their children and doing what is best for the community," said King County Board of Health Chair and Council member Carolyn Edmonds.

Despite the improvements, Public Health is concerned about recent trends in school exemption rates. From 1999-2000 to 2003-2004 there has been an increase from 2.9 to 4.2 percent in parents claiming exemption from immunizations for their children. In Washington State, parents or legal guardians have the right to choose not to immunize their children based on medical, religious, or philosophical reasons. An important goal for Public Health is to assure that those who choose exemption are fully informed of the consequences of disease.

Elimination of Rubella in the U.S.

A childhood disease that once caused numerous deaths and serious permanent disabilities in infants and children is now a fading memory. The rubella virus is no longer considered to be a major public health threat in the U.S. thanks to the more than thirty year vaccination program in this country.

In the U.S. between 1964 and 1965, an estimated 12.5 million cases of rubella and 20,000 cases of congenital rubella syndrome (CRS) were reported. During this time, CRS was responsible for 1,800 cases of mental retardation, 11,600 cases of deafness, 3,580 cases of blindness, and 2,100 neonatal deaths.

Officials at the CDC emphasize that those managing vaccination efforts remain vigilant to prevent a resurgence of rubella in the U.S. because bordering countries have active disease and international travel is common. Working relationships have been forged between the U.S., the Pan American Health Organization (PAHO), and Mexico to improve efforts to control rubella.

Tetanus: Are Your Patients Up-to-Date?

A recent study published in the *American Journal of Emergency Medicine* revealed that a large number of people report their immunization status incorrectly. In a review of 1000 patients at an urban hospital, 26 percent of patients provided an inaccurate history of tetanus vaccination when validated by further history taking or chart review.[1]

An annual average of 43 tetanus cases were reported in the U.S. between 1998 and 2000. Numbers of tetanus cases continue to decline, however, the percentage of cases among 25 to 59 year olds has increased during the last decade. Fifty-four percent of the cases caused by acute injury occurred during gardening/farming or while engaging in other outdoor activities.[2] Puncture wounds were the most common cause of tetanus related injury, followed by lacerations and abrasions. *…Continued on page 2*

VFC News
Vaccines for Children Program

New Medicare Reimbursement Rate Does Not Apply to VFC

The Centers for Medicaid and Medicare Services (CMS), has recently increased the reimbursement rate for vaccination to $18.21 for persons eligible for Medicare Part B benefits. **However, the maximum allowable vaccine administration fee** that may be charged for state-supplied childhood vaccine (set by federal statute) **is <u>not affected</u> by this change.** The maximum vaccine administration charge allowed for VFC vaccine in Washington State **remains at $15.60 per dose.**

Update Your Report Forms

For 2005, be sure to use the current versions of the VFC report forms. There are updated forms for the Private Provider's Report of Vaccine Usage and the State Supplied Vaccine Request Form. All health care professionals should also be using the version of the Temperature Monitoring Log with space for recording the temperature two times per day. Please note that the Usage Report's age groups have changed to more closely reflect the Recommended Child & Adolescent Immunization Schedule; on the Vaccine Request form, the only change is a re-ordering of available vaccines to match the Washington State Department of Health's alphabetical list. Check your VFC Provider Manual or call (206) 296-4774 to request new forms.

New Packaging for Tetanus-Diphtheria Vaccine

Health care professionals in the VFC Program have begun receiving Decavac®, a preservative free Td vaccine. Decavac is packaged as ten pre-filled syringes per box, and replaces the generic Td in multi-dose vials.

New to the Program

Please welcome Katy Ellis to the VFC Program. Katy will work on vaccine storage issues and database management, so you may be talking with her. She is in the office Monday, Wednesday and Friday. Susan Tower has changed her schedule, and is now in the office Monday, Tuesday and Thursday each week. Darren Robertson, Ricky Robles, Anna Bero and the immunization nurses are available Monday through Friday.

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Beyond the Rusty Nail

Since 1998, tetanus exposure was reported to come from predictable sources such as nails, splinters, barbed wire and tools. Tetanus infections following a spider bite, tattoo and rose bush (one each) were also reported.[2]

Although some patients may request tetanus as a single antigen, discounting the value of vaccination against diphtheria, the disease is currently occurring in 87 countries. The CDC has stated, "There is virtually no reason to use tetanus toxoid as a single antigen for protection. Instead, tetanus toxoid should be given in combination with diphtheria toxoid, since periodic boosting is needed against both diseases."[3]

1. Gindi, M., Oravitz, P., Sexton, R., Shpak, M., & Eisenhart, A. (2005). Unreliability of reported tetanus vaccination histories. Am J Emerg Med, 23 (2), 120-2.
2. CDC. Tetanus surveillance – United States, 1998-2000. MMWR 2003; 52 (SS03): 1-8.
3. CDC. Epidemiology and Prevention of Vaccine-Preventable Diseases. Atkinson, W., Hamborsky, J., & Wolfe, S., eds. 8th ed. Washington, DC: Public Health Foundations, 2004.

King County VFC Usage Reports May Indicate Underutilization of PPV for High Risk Children

Since the introduction of pneumococcal conjugate 7-valent (PCV), usage of the pneumococcal polysaccharide vaccine (PPV) in the VFC program has declined 65 percent, leading to concerns that health care professionals perceive PCV as a replacement for, rather than a supplement to, PPV. **For high risk children, <u>both</u> PCV and PPV are recommended.**

PCV (Prevnar®) was introduced in 2000, and by the next year had met with overwhelming acceptance among physicians and families. Uptake was so rapid that the manufacturer has had difficulty meeting demand. The vaccine is recommended for all infants, with four doses due by the age of 15 months. It protects against seven serotypes of *S. pneumoniae*, conjugated to a non-toxic variant of diphtheria toxin. These seven serotypes are known to account for 86 percent of bacteremia, 83 percent of meningitis, and 65 percent of acute otitis media among U.S. children less than six years of age.

Use of PCV has reduced cases of invasive disease in children, and its use in children may be preventing the disease in adults. Contact with young children in a household is a risk factor for invasive pneumococcal disease in adults. PCV has been shown to reduce pneumococcal carriage, and a recent study in the *New England Journal of Medicine* showed a significant decline in pneumococcal disease rates in adults since the introduction of PCV for children.[1]

Pneumoccocal Vaccine: PCV and/or PPV?

Prior to the introduction of PCV, the only pneumococcal vaccine available was PPV (Pneumovax®, PnuImmune®). It contains polysaccharide antigen from 23 pneumococcal capsular types that cause 88 percent of bacteremic pneumococcal disease.

Routine Schedule of Pneumococcal Vaccines					
	2 mos	**4 mos**	**6 mos**	**12-15 mos**	**>2 yrs**
PCV	PCV	PCV	PCV	PCV	
PPV For High Risk People					PPV

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Table 1. Indications for Use of Pneumococcal Vaccines

Age	PCV Pneumococcal Conjugate Vaccine (7-valent) ***Prevnar®***	PPV Pneumococcal Polysaccharide Vaccine (23-valent) ***Pnuemovax®, PnuImmune®***
2-23 mos	***(State Funded)*** Routine use for **all children** in this age group	PPV is not licensed for children under 2 years of age
24-59 mos	***(State Funded)*** 1) Recommended for children with **High-risk Medical Conditions*** 2) Consider for: - All children 24-35 months - Children of Alaska Native, American Indian or African American descent - Children in child care centers	***(State-funded)*** Use for children with **High-risk Medical Conditions***
5-18 yrs	PCV is not routinely recommended for children > 5 years of age	***(State-funded)*** Use for children with **High-risk Medical Conditions***
19+ yrs	PCV is not licensed for adults	***(Purchased)*** Use for adults with **High-risk Medical Conditions***

*** <u>High-risk Medical Conditions</u>** include: sickle cell disease, asplenia or splenic dysfunction, HIV infection, congenital immunodeficiencies, renal failure or nephrotic syndrome, immunosuppressing conditions, chronic medical conditions including cardiac and pulmonary disease, CSF leaks, diabetes mellitus and cochlear implants.

PPV is targeted specifically to high risk people two years and older who are immune compromised and vulnerable to complications from pneumococcal disease, including children previously immunized with conjugate vaccine (Prevnar). (Table 1)

Frequently asked questions about PPV:

Should PCV and PPV be administered simultaneously?
No, they should be administered eight weeks apart.

Should people with asthma receive PPV?
Asthma is not an indication for routine pneumococcal vaccination unless it occurs with chronic bronchitis, emphysema, or long-term systemic corticosteroid use. However, persons with obstructive lung disease should be vaccinated regardless of the cause.

Is PPV immunization still necessary if the person has a history of pneumococcal pneumonia?
Yes. It is beneficial to vaccinate people with high risk medical conditions because the vaccine protects against 23 serotypes.

Should HIV-positive people be immunized with PPV?
Yes. The risk of pneumococcal infection is up to 100 times greater in HIV-infected persons than in other adults of similar age. Although severely immunocompromised people may not respond well to the vaccine, the risk of disease is great enough to warrant vaccination even though there is a chance that the vaccine may not produce an antibody response.

When is revaccination necessary?
Revaccination with PPV is not recommended for people under 65 years of age who have normal immune function. Table 2 provides guidelines for revaccination:

Table 2. Guidelines for Revaccination with PPV

Recipients of PPV	***Revaccinate?***
2 – 10 yrs and immunocompromised	***Yes*** – 1 dose 3 years after previous dose
11 yrs and older and immunocompromised	***Yes*** – 1 dose 5 years after previous dose
65 yrs and older, vaccinated previously, and not immuncompromised:	
First dose at 65 or older	***No***
First dose under 65 years old, less than 5 years ago	***No***
First dose under 65 years, 5 or more years ago	***Yes*** – 1 dose

1. Whiney, C.G., Farley, M.M., Hadler, J., Harrison, L.H., Bennett, N.M., Lynfield, R., Reingold, A., Cieslak, P.R., Pilishvili, T., Jackson, D., Facklam, R.R., Jorgensen, J.H., & Schuchat, A. (2003). Decline in invasive pneumococcal disease after the introduction of protein-polysaccharide conjugate vaccine. N Engl J Med, 348 (18), 1737-1746.

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Highlights

New VIS for Meningococcal Vaccine

The Vaccine Information Statement (VIS) for the new meningococcal vaccine is now available on the National Immunization Program website located at: www.cdc.gov/nip/publications/VIS/vis-mening.pdf.

Meningococcal Vaccine Offered by Public Health

Menactra® the new conjugate meningococcal vaccine will now be offered by Public Health - Seattle & King County clinics. The vaccine is recommended for children ages 11-12 years, teens entering high school, college freshmen living in dormitories, people with asplenia or terminal complement component deficiency, microbiologists who are routinely exposed to meningococcal bacteria, military recruits, anyone traveling to a meningococcal endemic country, and people exposed to meningitis during an outbreak.

New CDC Web-Based Immunization Training

The CDC and the Association of Teachers of Preventive Medicine has created a web-based training course titled, ***Immunization: You Call the Shots***. This is an excellent immunization training tool that takes approximately one to two hours to complete. The course covers immunology basics such as active versus passive immunity, the mechanisms of various vaccines, and other essential information. To view it, visit: www.cdc.gov/nip/ed/youcalltheshots.htm.

CDC Immunization Update 2005

Mark your calendars for the CDC's 2005 Immunization Update satellite course co-sponsored by the Region X Public Health Service. The broadcast will be held July 28th in Seattle at the Blanchard Plaza Building (6th and Blanchard).

The primary focus of the session will be to provide the most current information available on vaccines and recommended immunization practices. Health care professionals who either give immunizations or set policy for their offices are encouraged to attend. CME/CEUs will be awarded from the CDC to course participants who complete the training. For more information, call (206) 296-5252.

Available in alternate formats